

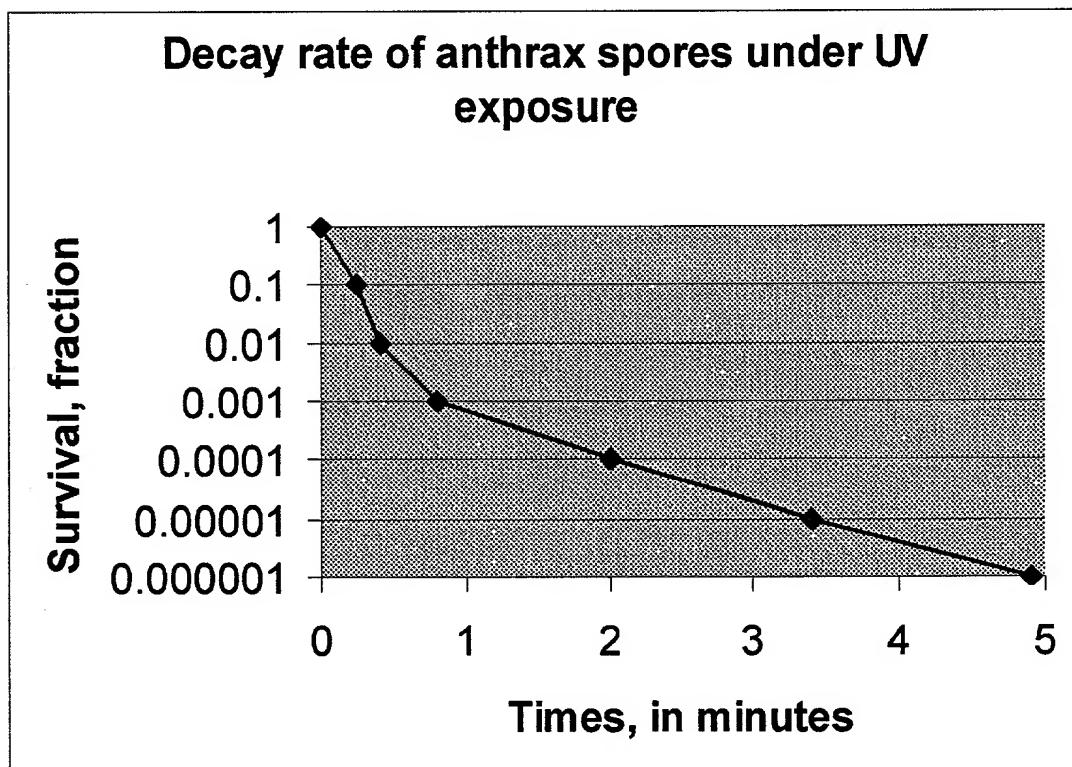
During the disinfection process, the average surface intensity will be at least 4690  $\mu\text{W}/\text{Cm}^2$  (see table 3). The time to sterilize mail contaminated with anthrax spores is estimated to be five (5) minutes or less (see figure 1).

**Table 3**

**Average Surface Intensity - Horizontal Plane**

|  |      |                           |
|--|------|---------------------------|
| Overhead lamps                                     | 2304 | $\mu\text{W}/\text{Cm}^2$ |
| Side lamps   | 158  | $\mu\text{W}/\text{Cm}^2$ |
| Total planar intensity                             | 2462 | $\mu\text{W}/\text{Cm}^2$ |
| Reflective intensity at 65%                        | 2228 | $\mu\text{W}/\text{Cm}^2$ |
| Total planar intensity at surface 65% reflectivity | 4690 | $\mu\text{W}/\text{Cm}^2$ |

**Figure 1**



**CLAIMS**

What is claimed is:

1. A method for destroying pathogens and spores such as *Bacillus anthracis* (anthrax bacteria) and *Bacillus magaterium* sp. (anthrax spores) in a chamber having a set of wall and a ceiling panel, comprising mounting ultraviolet lights, located in parallel about a center point where mail pieces will be placed for disinfection.
2. The method of claim 1, wherein the wall/ceiling/floor surfaces are painted with aluminum or paneled with reflectant material.

3. The method of claim 1, wherein 18 fixtures, each containing 4 lamps putting out 13.8 watts of C-band ultraviolet light energy each, located 1 meter (39.3 inches) in parallel about a center were mail will be placed for disinfection.
4. The method of claim 1, wherein during the disinfection process, the average surface intensity will be at least 4690  $\mu\text{W}/\text{Cm}^2$ , sterilizing mail contaminated with anthrax spores within five (5) minutes or less.